## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 9 September 2005 (09.09.2005)

**PCT** 

## (10) International Publication Number WO 2005/082780 A1

(51) International Patent Classification<sup>7</sup>: A61L 27/00, 31/12, A61F 2/28 C01B 25/34,

(21) International Application Number:

PCT/EP2005/050815

- (22) International Filing Date: 25 February 2005 (25.02.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

- (30) Priority Data: FI2004A000048 27 February
  - 27 February 2004 (27.02.2004) I
- (71) Applicant (for all designated States except US): A. MENARINI INDUSTRIE FARMACEUTICHE RIUNITE S.r.J. [IT/IT]; Via Sette Santi 3, FIRENZE, 50131.
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ROVERI, Norberto [IT/IT]; Via Q. Di Marzio 20, I-40133 Bologna (IT). BIAGINI, Graziella [IT/IT]; Via Marconi 30, I-40122 Bologna (IT). TAMPIERI, Anna [IT/IT]; Via Cavour 19, I-48018 Faenza (IT). TOSETTI, Alessandro [IT/IT]; Via F. Paoletti, 13, I-50012 BAGNO A RIPOLI (IT). ALTAMURA, Maria [IT/IT]; Via San Gervasio 32, FIRENZE, 50131. GOSO, Cristina [IT/IT]; Via Nemorense 111, I-00199 Roma (IT).
- (74) Agents: GERVASI, Gemma et al.; NOTARBARTOLO & GERVASI S.p.A., Corso di Porta Vittoria 9, I-20122 MI-LAN (IT).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

5/082780 A1

(54) Title: BIOMIMETIC COMPOUNDS CONTAINING HYDROXYAPATITES SUBSTITUTED WITH MAGNESIUM AND CARBONATE, AND THE PROCESSES USED TO OBTAIN THEM

(57) Abstract: Carbonate hydroxyapatites containing magnesium, composite materials consisting of said hydroxyapatites and natural polymers are described; processes for the preparation of said materials and their use in orthopaedics and dentistry fields are also described.